

Amendments to the Drawings

The replacement sheet in the Appendix includes changes to Figure 5. In Figure 5, the incorrect designation of element 18' as element 20 has been corrected.

Remarks

Figure 5 has been amended to correct the designation of element 18'.

Claims 1-2 were rejected as unpatentable over BROWN 5,315,948 in view of BAUDET 6,302,044. Claim 1 has been amended and reconsideration and withdrawal of the rejection are respectfully requested.

Amended claim 1 includes, among other features, a sail wound around the reel, where the sail is non-deformable in compression parallel to the sail's luff, where the sail includes a fabric with transverse and longitudinal fibers (18, 18') resistive to compression and local buckling, where the compression resistive longitudinal fibers are parallel to a luff of the sail and oriented parallel to an axis of the reel along a whole length of the sail. Support for the amendment is found in Figure 5.

The present invention seeks to solve the problem of providing the shape and deformation of a sail needed for the forces required by the pressure of the wind. That is, the invention seeks to ensure that, for a given wind strength, the sail is adjusted in terms of area, as in a conventional reel solution, but also provides the necessary shape and deformation. As noted on page 1, lines 13-22, the deformation may cause the sail to wrinkle on its reel, which has the effect of accentuating the pocket formed in the sail and causing the sail to deform

further. Such deformations arise very often when the sail is reduced by rolling on the reel.

The Official Action relies on BAUDET for the suggestion to modify BROWN to include transverse and longitudinal fibers between two films. BAUDET discloses techniques for producing sails and deals with load lines 28 (Figure 1). At column 2, lines 55-67, BAUDET discloses that the interest is in reducing crimp or geometrical stretching of the yarn used in the sailcloth. There is no mentions of compression. That is BAUDET teaches the artisan about reducing stretching, and not about compression. One of skill in the art would not turn to this reference for anything related to compression. Indeed, a survey of the literature (e.g., Wikipedia/sailcloth) reveals that various factors are evaluated in determining the suitability of fiber for weaving a sailcloth, but resistance to compression is not one of them. This is novel.

Even if the fibers in BAUDET resist some minimal degree of compression, there is no teaching in the reference to encourage the artisan even to consider compression as a relevant factor. The reference must teach the artisan something relevant to what is claimed, and BAUDET does not.

Further many fibers do not resist buckling at all. Resistance to buckling is linked to the fiber's diameter and the present invention uses coarse fibers (specification, page 3, line 31).

Returning to BAUDET and the presently amended claims, the load lines 28 in BAUDET converge to the three extremities of the triangular sail. As a consequence, in the upper part of the sail the load lines are parallel to the axis of the reel, but in the bottom part of the sail the load lines are not parallel at all. BAUDET teaches the artisan to build the sail with the fibers aligned with the expected load lines 28, as explained at column 7, lines 14-15 and Figure 7. Thus, in the bottom part of the sail the load lines are not parallel to the hoist side of the sail but are quite orthogonal. By contrast, the fibers in the invention of amended claim 1 are oriented parallel to an axis of the reel along a whole length of the sail. The references, alone or in combination, do not suggest this.

Accordingly, amended claim 1 avoids the rejection under §103. Claim 2 avoids the rejection for the same reasons.

Claims 1-3 and 9-10 were rejected as unpatentable over CRALL 3,749,043 in view of BAUDET. Claims 1 and 9 have been amended and reconsideration and withdrawal of the rejection are respectfully requested. The shortcomings of BAUDET are noted above. CRALL is also silent about the longitudinal and transverse fibers in the sail fabric that resist compression and one of skill in the art would not learn of the claimed fibers that resist compression from these references, or that the fibers are to be oriented parallel to the axis of the reel along the whole

length of the sail. Accordingly, claims 1-3 and 9-10 avoid this rejection under §103.

Claim 4 was rejected as unpatentable over CRALL in view of BAUDET and NIC FR 2 676 984. Claims 5, 7, and 8 were rejected as unpatentable over CRALL in view of BAUDET and SHAPLAND 4,269,134. NIC and SHAPLAND do not make up for the above-noted shortcomings of BAUDET. Accordingly, these claims avoid these rejections under §103.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Thomas W. Perkins/
Thomas W. Perkins, Reg. No. 33,027
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

TWP/lad

Appendix

- one replacement drawing sheet.